

Ne-nen



IFWO

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/724,209

DATE: 08/16/2004

TIME: 16:04:59

Input Set : N:\Crf4\Refhold\10\_folder\J724209.raw

Output Set: N:\CRF4\08162004\J724209.raw

1 <110> APPLICANT: ADLER, JON ELLIOT  
 2 <120> TITLE OF INVENTION: T2R TASTE RECEPTORS AND GENES ENCODING SAME  
 3 <130> FILE REFERENCE: 100337.54075US  
 4 <140> CURRENT APPLICATION NUMBER: US/10/724,209  
 5 <141> CURRENT FILING DATE: 2003-12-01  
 6 <150> PRIOR APPLICATION NUMBER: 60/195,532  
 7 <151> PRIOR FILING DATE: 2000-04-07  
 8 <150> PRIOR APPLICATION NUMBER: 60/247,014  
 9 <151> PRIOR FILING DATE: 2000-11-13  
 10 <160> NUMBER OF SEQ ID NOS: 31  
 11 <170> SOFTWARE: PatentIn Ver. 2.1  
 13 <210> SEQ ID NO: 1  
 14 <211> LENGTH: 1002  
 15 <212> TYPE: DNA  
 16 <213> ORGANISM: Homo sapiens  
 17 <400> SEQUENCE: 1

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 19 atttcagtc tggagtttgc agtggggttt ctgaccaatg ctttcgtttt ctgggtaat 120  
 20 ttttggatg tagtgaagag gcaggcaactg agcaacagtg atttgtgtct gctgtgtctc 180  
 21 agcatcagcc ggctttcct gcatggactg ctgttccctga gtgctatcca gcttaccac 240  
 22 ttccagaagt tgagtgaacc actgaaccac agctaccaag ccatcatcat gctatggatg 300  
 23 attgcaaacc aaggcaacct ctggcttgct gcctgcctca gcctgcttta ctgctccaag 360  
 24 ctcatccgtt tcttcacac cttcctgatc tgcttggcaa gctgggtctc caggaagatc 420  
 25 tccccatgtc tcctggatatttcttgc tcctgcatact gcaactgcct ctgtgtttgg 480  
 26 tgcttttta gcagaccta cttcacagtc acaactgtgc tattcatgaa taacaataca 540  
 27 aggctcaact ggcagattaa agatctcaat ttatttatt ctttccttct ctgctatctg 600  
 28 tggctgtgc ctcccttctt attgtttctg gtttcttctg ggatgctgac tgtctccctg 660  
 29 ggaaggcaca tgaggacaat gaaggcttat accagaaact ctcgtgaccc cagcctggag 720  
 30 gcccacatta aagccctcaa gtctttgtc tccttttct gtttcttctt gatatcatcc 780  
 31 tgtgttgct tcatactctgt gcccctactg attctgtggc gcgacaaaat aggggtgatg 840  
 32 gtttgtgttgg ggtataatggc agcttgcctc tctgggcattc cagccatct gatctcaggc 900  
 33 aatgccaagt tgaggagagc tgtgtatgacc attctgtctc gggctcagag cagcctgaag 960  
 34 gtaagagccg accacaaggc agattcccg accactgtctc ga 1002

36 <210> SEQ ID NO: 2  
 37 <211> LENGTH: 333  
 38 <212> TYPE: PRT  
 39 <213> ORGANISM: Homo sapiens  
 40 <400> SEQUENCE: 2

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 43 Thr Phe Leu Phe Ile Ser Val Leu Glu Phe Ala Val Gly Phe Leu Thr  
 44 20 25 30  
 45 Asn Ala Phe Val Phe Leu Val Asn Phe Trp Asp Val Val Lys Arg Gln



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47 Ala Leu Ser Asn Ser Asp Cys Val Leu Leu Cys Leu Ser Ile Ser Arg
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49 Leu Phe Leu His Gly Leu Leu Phe Leu Ser Ala Ile Gln Leu Thr His
50      65          70          75          80
51 Phe Gln Lys Leu Ser Glu Pro Leu Asn His Ser Tyr Gln Ala Ile Ile
52      85          90          95
53 Met Leu Trp Met Ile Ala Asn Gln Ala Asn Leu Trp Leu Ala Ala Cys
54      100         105         110
55 Leu Ser Leu Leu Tyr Cys Ser Lys Leu Ile Arg Phe Ser His Thr Phe
56      115         120         125
57 Leu Ile Cys Leu Ala Ser Trp Val Ser Arg Lys Ile Ser Gln Met Leu
58      130         135         140
59 Leu Gly Ile Ile Leu Cys Ser Cys Ile Cys Thr Val Leu Cys Val Trp
60      145         150         155         160
61 Cys Phe Phe Ser Arg Pro His Phe Thr Val Thr Thr Val Leu Phe Met
62      165         170         175
63 Asn Asn Asn Thr Arg Leu Asn Trp Gln Ile Lys Asp Leu Asn Leu Phe
64      180         185         190
65 Tyr Ser Phe Leu Phe Cys Tyr Leu Trp Ser Val Pro Pro Phe Leu Leu
66      195         200         205
67 Phe Leu Val Ser Ser Gly Met Leu Thr Val Ser Leu Gly Arg His Met
68      210         215         220
69 Arg Thr Met Lys Val Tyr Thr Arg Asn Ser Arg Asp Pro Ser Leu Glu
70      225         230         235         240
71 Ala His Ile Lys Ala Leu Lys Ser Leu Val Ser Phe Phe Cys Phe Phe
72      245         250         255
73 Val Ile Ser Ser Cys Val Ala Phe Ile Ser Val Pro Leu Leu Ile Leu
74      260         265         270
75 Trp Arg Asp Lys Ile Gly Val Met Val Cys Val Gly Ile Met Ala Ala
76      275         280         285
77 Cys Pro Ser Gly His Ala Ala Ile Leu Ile Ser Gly Asn Ala Lys Leu
78      290         295         300
79 Arg Arg Ala Val Met Thr Ile Leu Leu Trp Ala Gln Ser Ser Leu Lys
80      305         310         315         320
81 Val Arg Ala Asp His Lys Ala Asp Ser Arg Thr Leu Cys
82      325         330
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85 <211> LENGTH: 966
86 <212> TYPE: DNA
87 <213> ORGANISM: Homo sapiens
88 <400> SEQUENCE: 3
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91 atacatgcag ctgaatgggt tcaaaataag gcagtttcca caagtggcag gatcctgggt 180
92 ttccctgagtg tatccagaat agctctccaa agcctcatga tgtagaaat taccatcagc 240
93 tcaacctccc taagtttta ttctgaagac gctgttatatt atgcattcaa aataagttt 300
94 atattcttaa atttttgttag cctgtgtttt gctgcctggc tcagtttctt ctactttgtg 360
95 aagattgcca atttctccta ccccccttttc ctcaaactga ggtggagaat tactggattt 420

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Input Set : N:\Crf4\Refhold\10\_folder\J724209.raw  
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96      ataccctggc ttctgtggct gtccgtgttt atttccttca gtcacagcat gttctgcata 480
97      aacatctgca ctgtgtattt taacaattct ttccttatcc actcctccaa ctccactaag 540
98      aaaacatact tgcgtgagat caatgtggc ggtctggct tttctttaa cctggggatt 600
99      gtgactcctc tgatcatgtt catcctgaca gccaccctgc tgatcctctc tctcaagaga 660
100     cacaccctac acatggaaag caatgccaca gggtccaaacg accccagcat ggaggctcac 720
101     atggggcca tcaaagctat cagctacttt ctcattctct acatttcaa tgcagttgct 780
102     ctgtttatct acctgtccaa catgttgac atcaacagtc tgcgtgaaataa tttgtgccag 840
103     atcatcatgg ctgcctaccc tgccagccac tcaattctac tgattcaaga taaccctggg 900
104     ctgagaagag cctggaagcg gcttcagctt cgacttcatac ttacccaaa agagtggact 960
105     ctgtga                                         966
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108 <211> LENGTH: 321
109 <212> TYPE: PRT
110 <213> ORGANISM: Homo sapiens
111 <400> SEQUENCE: 4
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114     Ile Thr Leu Ile Leu Ala Val Leu Leu Ala Glu Tyr Leu Ile Gly Ile
115         20            25          30
116     Ile Ala Asn Gly Phe Ile Met Ala Ile His Ala Ala Glu Trp Val Gln
117         35            40          45
118     Asn Lys Ala Val Ser Thr Ser Gly Arg Ile Leu Val Phe Leu Ser Val
119         50            55          60
120     Ser Arg Ile Ala Leu Gln Ser Leu Met Met Leu Glu Ile Thr Ile Ser
121         65            70          75          80
122     Ser Thr Ser Leu Ser Phe Tyr Ser Glu Asp Ala Val Tyr Tyr Ala Phe
123         85            90          95
124     Lys Ile Ser Phe Ile Phe Leu Asn Phe Cys Ser Leu Trp Phe Ala Ala
125         100           105         110
126     Trp Leu Ser Phe Phe Tyr Phe Val Lys Ile Ala Asn Phe Ser Tyr Pro
127         115           120         125
128     Leu Phe Leu Lys Leu Arg Trp Arg Ile Thr Gly Leu Ile Pro Trp Leu
129         130           135         140
130     Leu Trp Leu Ser Val Phe Ile Ser Phe Ser His Ser Met Phe Cys Ile
131         145           150         155          160
132     Asn Ile Cys Thr Val Tyr Cys Asn Asn Ser Phe Pro Ile His Ser Ser
133         165           170         175
134     Asn Ser Thr Lys Lys Thr Tyr Leu Ser Glu Ile Asn Val Val Gly Leu
135         180           185         190
136     Ala Phe Phe Asn Leu Gly Ile Val Thr Pro Leu Ile Met Phe Ile
137         195           200         205
138     Leu Thr Ala Thr Leu Leu Ile Leu Ser Leu Lys Arg His Thr Leu His
139         210           215         220
140     Met Gly Ser Asn Ala Thr Gly Ser Asn Asp Pro Ser Met Glu Ala His
141         225           230         235          240
142     Met Gly Ala Ile Lys Ala Ile Ser Tyr Phe Leu Ile Leu Tyr Ile Phe
143         245           250         255
144     Asn Ala Val Ala Leu Phe Ile Tyr Leu Ser Asn Met Phe Asp Ile Asn
145         260           265         270

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146 Ser Leu Trp Asn Asn Leu Cys Gln Ile Ile Met Ala Ala Tyr Pro Ala  
147 275 280 285  
148 Ser His Ser Ile Leu Leu Ile Gln Asp Asn Pro Gly Leu Arg Arg Ala  
149 290 295 300  
150 Trp Lys Arg Leu Gln Leu Arg Leu His Leu Tyr Pro Lys Glu Trp Thr  
151 305 310 315 320  
152 Leu  
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155 <211> LENGTH: 972  
156 <212> TYPE: DNA  
157 <213> ORGANISM: Homo sapiens  
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161 gccatctatg gggctgagtg ggccaggggc aaaacactcc ccactggta ccgcattatg 180  
162 ttgatgctga gctttccag gctcttgcta cagatttggta tgatgctgga gaacattttc 240  
163 agtctgctat tccgaattgt ttataaccaa aactcagttgt atatcctttt caaagtcatc 300  
164 actgtcttcc tgaaccattc caatctctgg tttqctgcct qgctcaaagt cttctattgt 360  
165 cttagaattt caaaccttcaa tcatcccttg ttcttcctga tgaagaggaa aatcatagtg 420  
166 ctgatgcctt ggcttctcag gctgtcagtg ttggtttctt taagcttcag ctttcctctc 480  
167 tcgagagatg tcttcaatgt gtatgtaat agctccattc ctatcccctc ctccaactcc 540  
168 acggagaaga agtacttctc tgagaccaat atggtaacc tggattttt ctataacatg 600  
169 gggatcttcg ttcctctgat catgttcatc ctggcagcca ccctgctgat cctctctctc 660  
170 aagagacaca ccctacacat gggaaagcaat gccacaggg ccagggaccc cagcatgaag 720  
171 gctcacatag gggccatcaa agccaccagg tactttctca tcctctacat tttcaatgca 780  
172 attgtcttat ttcttccac gtccaaacatc tttgacactt acagttcctg gaatattttg 840  
173 tgcaagatca tcatggctgc ctaccctgccc ggccactcag tacaactgtat cttgggcaac 900  
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178 <211> LENGTH: 323  
179 <212> TYPE: PRT  
180 <213> ORGANISM: Homo sapiens  
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184 Lys Val Thr Phe Thr Leu Val Val Ser Gly Ile Glu Cys Ile Thr Gly  
185 20 25 30  
186 Ile Leu Gly Ser Gly Phe Ile Thr Ala Ile Tyr Gly Ala Glu Trp Ala  
187 35 40 45  
188 Arg Gly Lys Thr Leu Pro Thr Gly Asp Arg Ile Met Leu Met Leu Ser  
189 50 55 60  
190 Phe Ser Arg Leu Leu Leu Gln Ile Trp Met Met Leu Glu Asn Ile Phe  
191 65 70 75 80  
192 Ser Leu Leu Phe Arg Ile Val Tyr Asn Gln Asn Ser Val Tyr Ile Leu  
193 85 90 95  
194 Phe Lys Val Ile Thr Val Phe Leu Asn His Ser Asn Leu Trp Phe Ala  
195 100 105 110  
196 Ala Trp Leu Lys Val Phe Tyr Cys Leu Arg Ile Ala Asn Phe Asn His

## RAW SEQUENCE LISTING

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TIME: 16:04:59

Input Set : N:\Crf4\Refhold\10\_folder\J724209.raw  
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197      115          120          125
198 Pro Leu Phe Phe Leu Met Lys Arg Lys Ile Ile Val Leu Met Pro Trp
199      130          135          140
200 Leu Leu Arg Leu Ser Val Leu Val Ser Leu Ser Phe Ser Phe Pro Leu
201      145          150          155          160
202 Ser Arg Asp Val Phe Asn Val Tyr Val Asn Ser Ser Ile Pro Ile Pro
203      165          170          175
204 Ser Ser Asn Ser Thr Glu Lys Lys Tyr Phe Ser Glu Thr Asn Met Val
205      180          185          190
206 Asn Leu Val Phe Phe Tyr Asn Met Gly Ile Phe Val Pro Leu Ile Met
207      195          200          205
208 Phe Ile Leu Ala Ala Thr Leu Leu Ile Leu Ser Leu Lys Arg His Thr
209      210          215          220
210 Leu His Met Gly Ser Asn Ala Thr Gly Ser Arg Asp Pro Ser Met Lys
211      225          230          235          240
212 Ala His Ile Gly Ala Ile Lys Ala Thr Ser Tyr Phe Leu Ile Leu Tyr
213      245          250          255
214 Ile Phe Asn Ala Ile Ala Leu Phe Leu Ser Thr Ser Asn Ile Phe Asp
215      260          265          270
216 Thr Tyr Ser Ser Trp Asn Ile Leu Cys Lys Ile Ile Met Ala Ala Tyr
217      275          280          285
218 Pro Ala Gly His Ser Val Gln Leu Ile Leu Gly Asn Pro Gly Leu Arg
219      290          295          300
220 Arg Ala Trp Lys Arg Phe Gln His Gln Val Pro Leu Tyr Leu Lys Gly
221      305          310          315          320
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225 <211> LENGTH: 930
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227 <213> ORGANISM: Homo sapiens
228 <400> SEQUENCE: 7
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231 atctcccttg ctgaccaaat tctcaactgct ctggcggtct ccagagttgg tttgctctgg 180
232 gtattattat taaaactggta ttcaactgtt tgaaatccag cttttaatag tgtagaagta 240
233 agaactactg cttataatat ctgggcagtg atcaaccatt tcagcaactg gtttgcact 300
234 acccttcagca tatttttattt gctcaagattt gccaattttt ccaactttat ttttcttac 360
235 ttaaaaggaa gagttaaagag tgtcattctg gtgatgttgt tggggcctt gctattttg 420
236 gcttgcattc tttttgttat aaacatgaat gagattgtgc ggacaaaaaga atttgaaggaa 480
237 aacatgactt ggaagatcaa attgaagagt gcaatgtact tttcaaatat gactgttaacc 540
238 atggtagcaa acttagtacc cttcaactgtt accctactat cttttatgtt gttaatctgt 600
239 tctttgttta aacatctcaa gaagatgcag ctccatggta aaggatctca agatcccagc 660
240 accaagggtcc acataaaaagc tttgcaact gtgatctctt tcctcttggat atgtgccatt 720
241 tactttctgt ccataatgtt atcagtttgg agttttggaa gtctggaaaa caaacctgtc 780
242 ttcatgttct gcaaagctat tagattcagc tatccttcaa tccaccatt catcctgatt 840
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246 <210> SEQ ID NO: 8
247 <211> LENGTH: 309

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RAW SEQUENCE LISTING ERROR SUMMARY                   DATE: 08/16/2004  
PATENT APPLICATION: US/10/724,209               TIME: 16:05:00

Input Set : N:\Crf4\Refhold\10\_folder\J724209.raw  
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:25; Xaa Pos. 2,3,4,6,7,10,13,18

Seq#:26; Xaa Pos. 1,2,3,5,6,13

Seq#:27; Xaa Pos. 3,4,5,7,8,10,12,13

Seq#:28; Xaa Pos. 3,8,11,12,13,16

Seq#:29; Xaa Pos. 4,8,10,11,12,13,14

Seq#:30; Xaa Pos. 3,4,7,8,10,13,14

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/724,209

DATE: 08/16/2004

TIME: 16:05:00

Input Set : N:\Crf4\Reffold\10\_folder\J724209.raw  
Output Set: N:\CRF4\08162004\J724209.raw

:843 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0  
:341 Repeated in SeqNo=25  
.880 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0  
:923 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0  
:958 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0  
:998 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0  
:1037 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0